CLAIMS

1. A device for use in the electrochemical analysis of an analyte in a liquid sample, which comprises:

a non-conducting substrate;

a conductive layer, deposited on the substrate, in two parts, defining a non-conducting gap therebetween;

an analyte-specific reagent coated on the conductive layer, on one side of the gap;

a reference electrode on the conductive layer, on the other side of the gap;

a spacer layer deposited over the conductive layer;

a monofilament mesh coated with a surfactant or chaotropic agent, the mesh being laid over the reagent, the reference electrode and the spacer layer; and

a second non-conductive layer, adhered to the mesh layer, but not coextensive therewith, thereby providing a sample application area at one edge of the mesh.

2. A device according to claim 1, wherein the reagent is free of filler having both hydrophobic and hydrophilic surface regions.

3. A device according to claim 1 ~~or claim 2~~, wherein the analyte is glucose and the reagent is glucose dehydrogenase.

4. A device according to ~~any preceding claim~~ claim 1, wherein the mesh is treated with a surfactant.

5. A device according to ~~any preceding claim~~ claim 1, wherein the mesh is additionally coated with a cell lytic agent.

6. A device according ~~to any preceding claim~~ to claim 1, wherein the conductive layer comprises graphite particles, carbon particles and a polymer binder.

7. A device according to claim 6, wherein the graphite particles have an average size of 1-20 μm and a surface area of 1-50 m^2/g, and the carbon particles have an average size of 5-70 nm and a surface area of less than 150 m^2/g.

10. A method for the electrochemical analysis of an analyte in a liquid sample, which comprises applying the sample to the application area on a device according to ~~any preceding claim~~ claim 1, and quantifying the analyte by reaction with the reagent.

Add A2